REMARKS

Claims 1, 2, 4-7, 10-12, 15, and 17-20 are all the claims pending in the application. Claims 8-9, 13-14 and 21-22 have been canceled without prejudice or disclaimer. Claims 3 and 16 stand objected to only as being dependent upon a rejected base claim, and would be allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims. Claims 1, 6, 10, 15, and 19 are amended herein. No new matter is being added. Claims 1-2, 4-7, 10-12, 15 and 17-20 stand rejected on prior art grounds. Applicants respectfully traverse the rejections based on the following discussion.

I. The Prior Art Rejections

Claims 1, 4, 6-7, 10-12 and 19-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Shimizu (U.S. Patent No. 5,801,674). Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Shimizu, in view of Sasaki, et al. (U.S. Patent No. 6,211,849), hereinafter referred to as Sasaki. Applicants respectfully traverse these rejections based on the following discussion. Claims 5, 15 and 17-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Shimizu, in view of Hashimoto (U.S. Patent No. 6,628,259).

A. The Rejection Based on Shimizu

Shimizu discloses a driving system of so-called enable chain system for dividing signal electrodes of a liquid crystal display device into a plurality of signal electrode groups and driving the respective signal electrode groups by drivers formed in an IC form, a data register in the driver includes a control circuit for creating an internal start signal for controlling the timing at

which the display data fetching operation is started in synchronism with a clock signal.

Sasaki discloses a liquid crystal display device composed of a liquid crystal panel having a matrix array of liquid crystal pixels, a plurality of scanning lines formed along rows of the liquid crystal pixels, and a plurality of signal lines formed along columns of the liquid crystal pixels, and a display control circuit for selecting a row of the liquid crystal pixels via each of the scanning lines and controlling voltages across the liquid crystal pixels of the selected row via the signal lines. The display control circuit includes a signal line driver for sequentially driving the signal lines, and the signal line driver includes a plurality of driver ICs which are connected in cascade by inter-module wirings for transmitting a clock signal and a pixel data signal and each of which sequentially supplies the pixel data signal to a predetermined number of signal lines in synchronism with the clock signal. Particularly, in the liquid crystal display device, each driver IC has a clock waveform shaping circuit for performing a clock signal waveform shaping by regulating a duty ratio of the clock signal to be output together with the pixel data signal to the next driver IC.

Hashimoto discloses a drive circuit of a display unit having a control circuit and a plurality of source drivers that are cascade-connected to each other. A start pulse signal is inputted into the source driver at the first stage and digital image data signals and clock signals are inputted into the source drivers at the respective stages from the control circuit. Clock signals are generated by a clock control circuit of the control circuit. For the clock signals, a reading period and a transferring period appear alternately, and the frequency of the low frequency clock pulse signal in the transferring period is lower than that of the high frequency clock pulse signal in the reading period. A shift register of the source driver transfer the start pulse signal to said

source driver at the next source driver within one transferring period, and the start pulse signal is thus transferred in order from the source driver at the first stage up to the source driver at the final stage. Then, the source driver inputted the start pulse signal reads the digital image data signals in the reading period.

However, amended independent claims 1, 6, 10, 15, and 19 include features not taught in Sasaki or Hashimoto, either alone or in combination with one another. In particular, independent claims 1 and 10 generally incorporate the elements of original dependent claim 3, which the Office Action indicates contains allowable subject matter. Moreover, independent claims 6, 15, and 19 generally incorporate the elements of original dependent claim 16, which the Office Action similarly indicates contains allowable subject matter.

Thus, because neither Sasaki or Hashimoto teach "wherein said plurality of driver ICs sequentially drive said liquid crystal cells starting from a first liquid crystal cell located farthest away from said power source towards a second liquid crystal cell located closer to said power source" as recited in amended independent claim 1 or "wherein said output start signal starts at a downstream liquid crystal cell located farthest away from a power source towards upstream liquid crystal cells located closer to said power source" as recited in amended independent claim 10, claims 1 and 10 are patentable over the cited prior art. Similarly, because neither Sasaki or Hashimoto teach "wherein said plurality of driver ICs sequentially drive said liquid crystal cells starting from a downstream liquid crystal cell located farthest away from a power source" as recited in amendment independent claim 6 or "means for outputting timing setting data that represents delay time for said driver ICs to start outputting to liquid crystal cells starting from the downstream driver IC located farthest away from a power source" as recited in amended

independent claim 15 or "wherein the driver ICs apply a writing voltage to the liquid crystal cells starting from the downstream driver IC located farthest away from a power source" as recited in amended independent claim 19, claims 6, 15, and 19 are also patentable over the cited prior art.

Clearly, neither Sasaki nor Hashimoto teach sequentially driving the liquid crystal cells or outputting a start signal to a liquid crystal cell beginning with a downstream liquid crystal cell in relation to a power source.

In view of the foregoing, the Applicants respectfully submit that the cited prior art references, namely Sasaki and Hashimoto, do not teach or suggest the features defined by amended independent claims 1, 6, 10, 15, and 19 and as such, claims 1, 6, 10, 15, and 19 are patentable over Sasaki alone or in combination with Hashimoto. Further, dependent claims 2, 4, 5, 7, 11, 12, 17, 18, and 20 are similarly patentable over Sasaki alone or in combination with Hashimoto, not only by virtue of their dependency from patentable independent claims, respectively, but also by virtue of the additional features of the invention they define. Thus, the Applicants respectfully request that these rejections be reconsidered and withdrawn.

Moreover, the Applicants note that all claims are properly supported in the specification and accompanying drawings, and no new matter is being added. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

II. Formal Matters and Conclusion

In view of the foregoing, Applicants submit that claims 1, 2, 4-7, 10-12, 15, and 17-20, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the

above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 50-0510.

Respectfully submitted,

Dated: March 1, 2005

Mohammad S. Rahman, Esq.
Registration No. 43,029

McGinn & Gibb, PLLC
2568-A Riva Road, Suite 304
Annapolis, MD 21401
Voice: (301) 261-8625
Fax: (301) 261-8825
Customer Number: 29154